

REMARKS

Applicant has carefully considered the Office Action, and respectfully submits that the subject application is now in condition for allowance based upon the following remarks.

Interview

Applicant extends its gratitude for the telephonic interview granted on March 12, 2010. In fulfillment of the requirements of MPEP § 713.04, Applicant reports as follows:

- (A) application number:
10/551,711
- (B) name of applicant:
Kevin Hartle
- (C) name of examiner:
Maurice Williams
- (D) date of interview:
March 12, 2010
- (E) type of interview (personal, telephonic, electronic mail or video conference):
Telephonic
- (F) name of participant(s) (applicant, attorney, or agent, etc.):
Bryan Jaketic (applicant's attorney)
- (G) an indication whether or not an exhibit was shown or a demonstration conducted:
None
- (H) an identification of the claims discussed:
All claims, with particular attention to claim 30
- (I) an identification of the specific prior art discussed:
U.S. Patent No. 6,340,510 issued to Hess ("Hess") and U.K. Patent Application No. 2 265 959 to Pardy ("Pardy")
- (J) an indication whether an agreement was reached and if so, a description of the general nature of the agreement (may be by attachment of a copy of amendments or claims agreed as being allowable). (Agreements as to allowability are tentative and do not restrict further action by the examiner to the contrary.):

Characteristics of the disclosed sleeve of Hess were discussed. No agreement was reached.

Status of Claims

The subject application was originally filed with 29 claims. In a Preliminary Amendment dated December 13, 2005, Applicant cancelled claims 1-29 and added new claims 30-58. In a prior Amendment, Applicant cancelled claims 33 and 47. In a second prior Amendment, Applicant amended claims 30, 42, and 56. In a third prior Amendment, Applicant amended claims 30, 36, 42, 51, and 56. In the present Amendment, Applicant has amended claims 30, 42, and 56. Claims 30-32, 34-46, and 48-58 remain pending in the subject application.

Summary of Office Action

In the Office Action dated November 13, 2009, the Examiner:

- 1) rejected claims 30-32, 34-40, 42-44, 46, 48-52, and 55-57 under 35 U.S.C. § 103(a) as being unpatentable over Pardy in view of Hess; and
- 2) rejected claims 34, 41, 45, 53, 54, and 58 under 35 U.S.C. § 103(a) as being unpatentable over Pardy in view of Hess and further in view of U.S. Patent No. 6,176,147 issued to Ozeki (“Ozeki”).

35 U.S.C. § 103(a) Rejections

As discussed above, claims 30-32, 34-40, 42-44, 46, 48-52, and 55-57 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pardy in view of Hess. For at least the following reasons, Applicant traverses this rejection.

Claims 30-32 and 34-40

Independent claim 30, as amended, recites a “peripheral wall is configured to contain fluid and includes interwoven strands configured to be displaced relative to each other during large deformations of the cross-sectional shape of the hose and to absorb deformation energy as frictional loss between the strands.” (Emphasis added.) Support for this amendment may be

found throughout the specification, such as at p. 10, line 18 through p. 11, line 21. No new matter has been added. The Office concedes that Pardy fails to teach a wall including interwoven strands, and instead relies on the sleeving of Hess for this limitation. (Office Action at 3.) However, even if Hess teaches interwoven strands, the sleeving of Hess is not configured to contain fluid. Instead, it is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses.” (Col. 1, lines 11-13.) Accordingly, if the walls of the hose of Pardy were replaced with the interwoven strands of Hess, the hose would not contain fluid and would be rendered unsatisfactory for its intended purpose. Therefore the combination is improper. (See MPEP § 2145 (“proposed modification cannot render the prior art unsatisfactory for its intended purpose”) citing MPEP § 2143.01.)

Moreover, neither Pardy nor Hess disclose peripheral walls having “interwoven strands configured to be displaced relative to each other during large deformations.” (Emphasis added.) The Office concedes that Pardy fails to disclose interwoven strands. Hess discloses a sleeve that is heated, then cooled, such that “[w]hen the shaped product is removed from the heating chamber and cooled within a cooling chamber 17, the polymer recrystallizes or sets the filamentary material in a position in which the selvages are adjacent to or in overlapping relationship and are biased to yieldably remain in that position.” (Col. 3, lines 54-59 (emphasis added.)) Hess does not teach displacement of strands due to large deformations. In fact, the sleeving of Hess is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses” (col. 1, lines 11-13), and is therefore not subject to large deformations as claimed.

Additionally, claim 30 recites: “the peripheral wall of the hose has a non-circular shape.” Although the Office relies on Pardy for a teaching of this limitation, the proposed combination of Pardy and Hess would require that the peripheral wall of Pardy be replaced with Hess’ peripheral wall having interwoven strands. The peripheral wall of Hess is circular. Accordingly, the proposed combination of Pardy and Hess would fail to provide a peripheral wall having a non-circular shape.

For at least the foregoing reasons, the 35 U.S.C. § 103(a) rejection to claim 30 is unsupported and should be withdrawn. Further, claims 31, 32, 34, 35, and 37-40 depend either

directly or indirectly from claim 30 and incorporate each and every element therein. For at least the reasons discussed above, the rejection to these claims should also be withdrawn.

Additionally, claim 36 recites: “in the absence of fluid pressure the first wall parts are arranged to contact each other and fluid passageways remain adjacent the second wall parts.” Neither Pardy nor Hess discloses this element. Moreover, the Office Action does not even address this element. For at least this additional reason, the combination of Pardy and Hess fails to teach or suggest each and every element of claim 36, and its rejection should be withdrawn.

Further, claim 37 recites: “the peripheral wall has a shape defining a generally elliptical cross-section.” The Office asserts that Pardy discloses a generally elliptical cross-section in Figure 4. Applicant respectfully disagrees. Figure 4 of Pardy shows “a tube 32c of flat cross-section.” (Pardy, p. 3, lines 14-16.) A flat tube cannot be fairly described as a generally elliptical cross-section. As one of ordinary skill in the art would understand, an ellipse is a known geometric shape that is distinct from a flat tube. For at least this additional reason, the combination of Pardy and Hess fails to teach or suggest each and every element of claim 37, and its rejection should be withdrawn.

Claims 42-44, 46, 48-52, and 55

Independent claim 42, as amended, recites a “peripheral wall is configured to contain fluid and includes interwoven strands configured to be displaced relative to each other during deformation of the cross-sectional shape of the hose and to absorb deformation energy as frictional loss between the strands.” Support for this amendment may be found throughout the specification, such as at p. 10, line 18 through p. 11, line 21. No new matter has been added. The Office concedes that Pardy fails to teach a wall including interwoven strands, and instead relies on the sleeving of Hess for this limitation. (Office Action at 3.) However, even if Hess teaches interwoven strands, the sleeving of Hess is not configured to contain fluid. Instead, it is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses.” (Col. 1, lines 11-13.) If the walls of the hose of Pardy were replaced with the interwoven strands of Hess, the hose would not contain fluid and would therefore be rendered unsatisfactory for its intended purpose. Therefore the combination is improper. (See MPEP § 2145 (“proposed modification cannot render the prior art unsatisfactory for its intended purpose”) citing MPEP § 2143.01.)

Moreover, neither Pardy nor Hess disclose peripheral walls having “interwoven strands configured to be displaced relative to each other during deformations.” The Office concedes that Pardy fails to disclose interwoven strands. Hess discloses a sleeve that is heated, then cooled, such that “[w]hen the shaped product is removed from the heating chamber and cooled within a cooling chamber 17, the polymer recrystallizes or sets the filamentary material in a position in which the selvages are adjacent to or in overlapping relationship and are biased to yieldably remain in that position.” (Col. 3, lines 54-59 (emphasis added.)) Hess does not teach displacement of strands due to deformations. Instead, the sleeving of Hess is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses” (col. 1, lines 11-13), and is therefore not subject to deformations.

Additionally, claim 42 recites: “a peripheral wall defining, in a cross-sectional plane perpendicular to the axis, a noncircular area of magnitude.” Although the Office relies on Pardy for a teaching of this limitation, the proposed combination of Pardy and Hess would require that the peripheral wall of Pardy be replaced with Hess’ peripheral wall having interwoven strands. The peripheral wall of Hess is circular. Accordingly, the proposed combination of Pardy and Hess would fail to provide a peripheral wall having a non-circular area.

For at least the foregoing reasons, the 35 U.S.C. § 103(a) rejection to claim 42 is unsupported and should be withdrawn. Further, claims 43, 44, 46, 48-52, and 55 depend either directly or indirectly from claim 42 and incorporate each and every element therein. For at least the reasons discussed above, the rejection to these claims should also be withdrawn.

Further, claim 50 recites: “the peripheral wall has a shape defining a generally elliptical cross-section.” The Office asserts that Pardy discloses a generally elliptical cross-section in Figure 4. Applicant respectfully disagrees. Figure 4 of Pardy shows “a tube 32c of flat cross-section.” (Pardy, p. 3, lines 14-16.) A flat tube cannot be fairly described as a generally elliptical cross-section. As one of ordinary skill in the art would understand, an ellipse is a known geometric shape that is distinct from a flat tube. For at least this additional reason, the combination of Pardy and Hess fails to teach or suggest each and every element of claim 37, and its rejection should be withdrawn.

Additionally, claim 51 recites: “in the absence of fluid pressure the first wall parts are arranged to contact each other and fluid passageways remain adjacent the second wall parts.”

Neither Pardy nor Hess discloses this element. Moreover, the Office Action fails to address this element. For at least this additional reason, the combination of Pardy and Hess fails to teach or suggest each and every element of claim 36, and its rejection should be withdrawn.

Claims 56 and 57

Independent claim 56, as amended, recites “providing the peripheral wall with a construction configured to contain fluid and including interwoven strands configured to be displaced relative to each other during deformation of the cross-sectional shape of the hose and to absorb deformation energy as frictional loss between the strands” Support for this amendment may be found throughout the specification, such as at p. 10, line 18 through p. 11, line 21. No new matter has been added. The Office concedes that Pardy fails to teach a wall including interwoven strands, and instead relies on the sleeving of Hess for this limitation. (Office Action at 3.) However, even if Hess teaches interwoven strands, the sleeving of Hess is not configured to contain fluid. Instead, it is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses.” (Col. 1, lines 11-13.) If the walls of the hose of Pardy were replaced with the interwoven strands of Hess, the hose would not contain fluid and would therefore be rendered unsatisfactory for its intended purpose. Therefore the combination is improper. (See MPEP § 2145 (“proposed modification cannot render the prior art unsatisfactory for its intended purpose”) citing MPEP § 2143.01.)

Moreover, neither Pardy nor Hess disclose peripheral walls having “interwoven strands configured to be displaced relative to each other during deformation of the cross-sectional shape of the hose.” The Office concedes that Pardy fails to disclose interwoven strands. Hess discloses a sleeve that is heated, then cooled, noting “[w]hen the shaped product is removed from the heating chamber and cooled within a cooling chamber 17, the polymer recrystallizes or sets the filamentary material in a position in which the selvages are adjacent to or in overlapping relationship and are biased to yieldably remain in that position.” (Col. 3, lines 54-59 (emphasis added.)) Hess does not teach displacement of strands due to deformations. Instead, the sleeving of Hess is configured to be placed around “elongated objects such as automotive exhaust gas recirculation devices and wiring harnesses” (col. 1, lines 11-13), and is therefore not subject to deformations.

Additionally, claim 56 recites: “providing the peripheral wall of the hose with a non-circular shape.” Although the Office relies on Pardy for a teaching of this limitation, the proposed combination of Pardy and Hess would require that the peripheral wall of Pardy be replaced with Hess’ peripheral wall having interwoven strands. The peripheral wall of Hess is circular. Accordingly, the proposed combination of Pardy and Hess would fail to provide a peripheral wall having a non-circular area.

For at least the foregoing reasons, the 35 U.S.C. § 103(a) rejection to claim 56 is unsupported and should be withdrawn. Further, claim 57 depends directly from claim 56 and incorporates each and every element therein. For at least the reasons discussed above, the rejection to claim 57 should also be withdrawn.

35 U.S.C. § 103(a) Rejection of Claims 34, 41, 45, 53, 54, and 58 Based on Pardy in View of Hess and Further in View of Ozeki

As discussed above, claims 34, 41, 45, 53, 54, and 58 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Pardy in view of Hess and further in view of Ozeki. For at least the following reasons, Applicant traverses this rejection.

Claims 34 and 41 depend directly from independent claim 30 and incorporate by reference all of the elements from this claim. The combination of Pardy, Hess, and Ozeki fails to disclose or suggest each and every element recited by claim 30 for the reasons discussed above.

Claims 45, 53, and 54 depend directly from independent claim 42 and incorporate by reference all of the elements from this claim. The combination of Pardy, Hess, and Ozeki fails to disclose or suggest each and every element recited by claim 42 for the reasons discussed above.

Claim 58 depends directly from independent claim 56 and incorporates by reference all of the elements from this claim. The combination of Pardy, Hess, and Ozeki fails to disclose or suggest each and every element recited by claim 56 for the reasons discussed above.

For at least these reasons, the 35 U.S.C. § 103(a) rejection with respect to claims 34, 41, 45, 53, 54, and 58 are unsupported and should be withdrawn.

Additionally, claims 41, 45 and 58 relate to the flexible damping hose being mounted on the actuator. The Office specifically refers to the hose 54 which delivers hydraulic fluid and is

disposed along a rack casing 22 (these being shown in Fig. 5 of Ozeki). However, as recited in the independent claims, the hose is a flexible damping hose largely comprising non-metallic materials in at least the hydraulic fluid carrying part thereof. In claims 41, 45, and 48, the damping hose is attached as a separate entity to a steering rack. In Ozeki, the pipe 54 is presumably a metal pipe since as column 3, lines 40 to 43 point out, the pipe 54 is “incorporated integrally by a casting” (into the steering rack 22). Therefore, the pipe 54 of Ozeki is metal and cannot operate as a hydraulic damping hose.

For at least this additional reason, the 35 U.S.C. § 103(a) rejection with respect to claims 41, 45 and 58 are unsupported and should be withdrawn.

Conclusion

In view of the remarks above, it is believed that claims 30-32, 34-46, and 48-58 are in condition for allowance and notice to such effect is respectfully requested. If the Examiner thinks a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned at the phone number provided below.

If any fees are due in connection with this Amendment, the Commissioner is authorized to charge Deposit Account No. 02-2051, specifically identifying Docket No. 29390-1.

Respectfully submitted,

Dated: March 15, 2010

By: /Bryan J. Jaketic/
Bryan J. Jaketic
Reg. No. 56,280

**BENESCH, FRIEDLANDER,
COPLAN & ARONOFF LLP**
200 Public Square
Suite 2300
Cleveland, OH 44114
(216) 363-4478
Attorney for Applicant